case of the female stylet could not be seen in the male, and it is quite possible that it is not present; the protrudor muscles are also much less developed in the latter.

The oesophagus of the male, being very obscure, could not be studied in all the desired details. According to the writer's opinion, the reduced stylet does not mean that the males do not feed during the adult stage, since in one of the individuals of that sex three normal salivary glands were plainly visible. This supposition that the male does not cease to feed after developing into the adult stage is in opposition to what has been supposed for some other tylenchids (e. g., *Neotylenchus abulbosus* Steiner, 1931) (Steiner and Buhrer, 1932).

R. melancholicus males are undoubtly functional, not only for having normal spicules and testis, but also for the presence of abundant spermatozoa filling the female receptaculum seminis.

Another interesting feature of sexual dimorphism may be found in the location of the phasmids which, in the male, are on the tail but, in the female, at level with the anus or a little in front.

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HERPETOLOGY.—Desmognathus planiceps, *a new salamander from Virginia.*

Walter B. Newman, Hyattsville, Md. (Communicated by Doris M. Cochran.)

During the course of herpetological investigations along the southern portion of the Blue Ridge in Virginia a number of very interesting specimens and records were obtained. Among the salamanders collected was a series of 19 *Desmognathus* that possessed such unique characteristics and coloration that I feel that they are justifiably nameworthy and therefore propose that this new salamander be called:

Desmognathus planiceps, n. sp.

Diagnosis.—A large, heavy-bodied *Desmognathus* with the following characteristics: broad, flattened head; spatulate and strongly depressed snout; enlarged and recurved premaxillary teeth in adult males; conspicuous, and normally straight-edged, dorsal band sharply margined with blackish; chest and anterior two-thirds of belly immaculate; chin, throat, and posterior third of belly lightly spotted with brownish-tan.

Holotype.—An adult male collected by Richard L. Hoffman and Walter B. Newman on May 12, 1951, from a portion of the stream (approximate elevation 2800 feet) dropping down into the gorge below the Dan River Dam near Meadows of Dan, Patrick County, Va. This specimen is at present in the personal collection of the author (WBN 1316), but it will eventually be deposited in the U. S. National Museum.

Paratypes.—One topotype, WBN 1318, in addition to the holotype, was collected from the Dan River gorge on May 12, 1951, by Richard L. Hoffman and Walter B Newman. Four topotypes, WBN 1322-4, were collected from this same site by Richard L. Hoffman, Walter B. Newman, and Jaine P. Newman on May 30, 1951.

Five paratypes, WBN 1326-9, 1331, were collected in a mountain stream (approximate elevation 2,400 feet) along Route 8, 5.5 miles northwest of Woolwine, Patrick County, Va., by Richard L. Hoffman, Walter B. Newman, and Jaine P. Newman on May 30, 1951. Eight additional paratypes, WBN 1332-9, were collected from the same locality on August 27, 1951, by Richard L. Hoffman and Walter B. Newman.

Description of holotype.—Snout spatulate; sides of head from anterior corner of eye to angle of jaw nearly parallel; cheeks noticeably swollen; head strongly depressed, sloping abruptly from the eyes to tip of snout; a short vertical groove from angle of jaw to a sinuous groove extending from the eye to the vertical extension of the gular fold; tip of jaw with pointed mental gland; body broad, heavy, and quite flattened, with a distinct and impressed median dorsal line; tail subquadrate in section near base, becoming slightly keeled above and rounded below posteriorly; posterior half of tail wanting. Legs stout, toes 4–5, those of the forefeet 1-4-2-3 in order of length from shortest to longest, hind feet 1-5-2-3-4; webbing between toes scarcely evident. Tongue roughly diamond-shaped in outline, shortened behind, free at sides and behind, the surface spongy. Vent slightly raised and papillate. Costal grooves 14, counting one each in the axilla and groin; intercostal grooves 4.

All measurements are in millimeters. Tip of snout to anterior angle of vent, 62; tail ?; greatest width of body, 13; greatest height of body, 9; axilla to groin, 36; greatest width of tail, 7; greatest height of tail, 7; tip of snout to gular fold, 17; tip of snout to anterior insertion of forelimb, 20; greatest width of head, 13; width of head measured at anterior angle of eye, 10; eye, measured from anterior to posterior corners, 2.1; forelimb, measured from insertion of limb to tip of longest toe, 11.5; hindlimb, similarly measured, 16; vomerine teeth absent; parasphenoid teeth in two broad patches that meet anteriorly and diverge posteriorly, being nearly uniform in width throughout their entire length.

The dorsum is characterized by a broad, straight-edged, reddish-brown dorsal band, sharply bordered with blackish, that originates on the head slightly anterior to the vertical extension of the gular fold and continues onto the tail, where it becomes abruptly reddish and serrated above the posterior angle of the vent. Irregular brownish-black blotches are present within the band tending to congregate along the

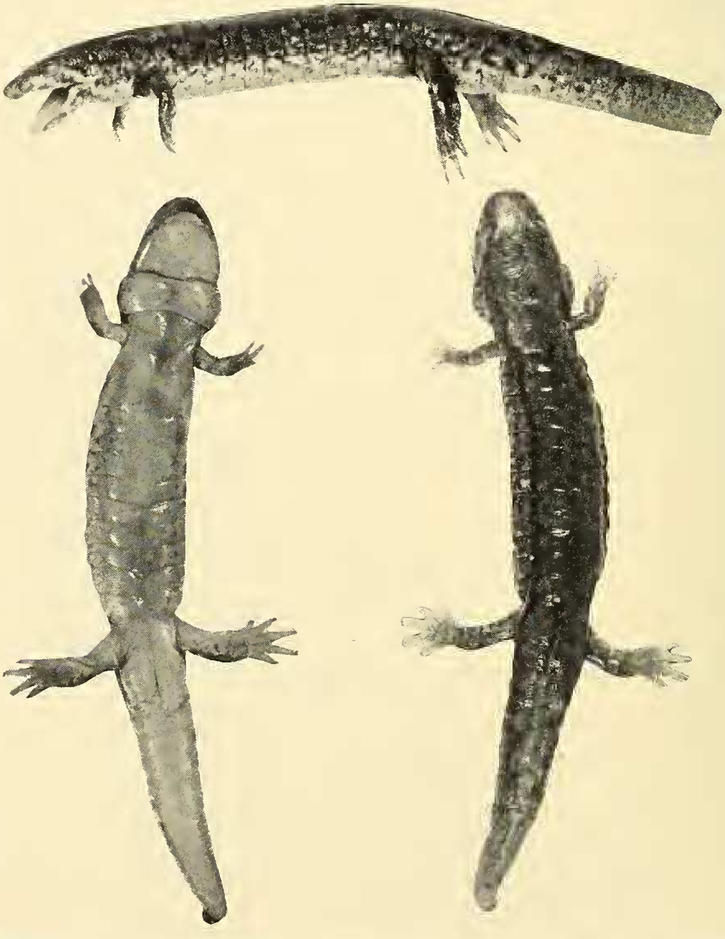

FIG. 1.—Lateral, ventral, and dorsal aspect of *Desmognathus planiceps*, n. sp., type specimen. Photographs courtesy of the Smithsonian Institution.

middorsal line. A pair of conspicuous whitish-yellow spots are present in the outer edge of the band above the insertion of the forelimb. The dorsal surface of the head is reddish-brown up to the eyes, where there is a pronounced line of demarcation between this point and the light tan snout. A conspicuous black spot is centered on the posterior portion of the head. The sides are mottled with brownish and whitish-gray which stops rather abruptly at the outer edge of the belly. Along the sides of the tail there is a row of dark-bordered light spots. The throat is irregularly spotted with tan. The chest is immaculate; the belly immaculate to a point anterior to the hindlimbs, where it becomes lightly spotted with tan.

Variation.—Of the 18 paratypes collected, 12 were marked like the holotype. Of the remaining six specimens, two have a completely spotted ventrum but a typically marked dorsum, whereas three individuals have a grayish-brown mottling that partially or wholly obscures the dorsal band and another has only a few scattered dark spots to indicate this band and lacks much of the heavy mottling along the sides. The latter four specimens all have typically marked ventrums.

All specimens have 14 costal grooves. Intercostal grooves vary from 3 to 5 (average 4) with the larger individuals generally exhibiting the larger number. Vomerine teeth are lacking in large adult males. The largest male with vomerine teeth measures 42 mm in snout-vent length. When present, the number of teeth in males varies from 4 to 13 (mean 8.0). The only two females collected measure 47 and 50 mm in snout-vent length and have 11 and 18 vomerine teeth, respectively. Although only two females were found, counts and measurements do seem to indicate that vomerine teeth are retained in adult females and also that they possess a greater number of teeth than the young males.

Adult males have a distinctly pointed mental gland and this is probably the quickest and easiest method of distinguishing between the two sexes.

Size.—This is one of the larger *Desmognathus* with adult males attaining an estimated total length of 128 mm or more. Unfortunately, the three largest adults, all males, have missing or regenerated tails, and so the extreme total length is an estimated figure based on proportional tail length percentages. The largest specimen with a complete tail measures 120 mm in total length. This specimen has a snout-vent length of 58 mm, while the largest snout-vent measurement of 18 specimens is 63 mm. The smallest individual found has a snout-vent length of 20 mm and a total length of 41 mm. The snout-vent length of the 10 largest adults varies from 47 to 63 mm (mean 55.8 mm).

Remarks.—The spatulate snout, sharply defined dorsal band, and tan spotting of the ventrum separates this species readily from the other large *Desmognathus*, such as *D. quadramaculatus*, and the subspecies of *D. fuscus* and *D. monticola*. The aquatic habits, large size, and heavy body distinquishes *D. planiceps* from the remaining smaller and more terrestrial forms of this genus. *D. planiceps* could be confused with *Leurognathus* because of its flattened head, but the inconspicuous inner naris, compressed tail, and absence of a premaxillary fontanelle of the latter quickly separates the two forms.

D. planiceps, being similar in structure and habits to the more primative forms of *Desmognathus*, presents an interesting evolutionary problem, but I do not consider it to be within the scope of this paper to try to theorize or evaluate the possible relationships that *planiceps* has to the existing known species of this genus. This undoubtedly requires a review of the whole group before a reasonable and sensible picture can be presented properly.

Habits and habitat.—In both localities *D. planiceps* was taken from cool, heavily shaded, mountain streams and was extremely active when discovered. In most instances *D. planiceps* and *D. quadramaculatus* were found to inhabit rocky areas in the shallow, fast-flowing water, while *D. monticola* and *D. fuscus* were more frequently found under rocks and debris along the edges.

Nothing is known of the breeding habits of this species, but a gravid female collected August 27, measuring 47 mm in snout-vent length, contained 19 large, yolk-laden eggs measuring 2 to 4 mm. in diameter.

Range—Apparently restricted to mountain streams in the southern portion of the Blue Ridge in Virginia.

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PROCEEDINGS OF THE ACADEMY

57th ANNUAL MEETING

The 57th Annual Meeting and dinner of the Academy was held at the Kennedy-Warren on the evening of January 20, 1955.

After dinner President Defandorf called the meeting to order. The minutes of the 56th Annual Meeting, as published in the Journal **44:** 157–163, May 1954, were approved.

In lieu of the usual reports of officers and committees the President presented a brief summary of the activities of the Academy during the year.

The complete reports of the officers and committee chairman follow:

REPORT OF THE SECRETARY

As of January 1, 1955, the membership of the Academy was 961, a net gain of 28 members during the year. The membership includes 855 active members, of which 675 are resident, 96 retired members, and 10 honorary members. Eleven members resigned, 9 were dropped for nonpayment of dues, and 3 were transferred to the retired list.

The deaths of 17 members were reported to the Secretary since the last Annual Meeting:

Armin O. Leuschner, April 22, 1953; Francis E. Fox, December 29, 1953; Frank Wenner, February 7, 1954; Charles L. Marlatt, March 3, 1954; Thomas P. Pendleton, May 28, 1954; James S. Simmons, July 31, 1954; John C. Hubbard, August 2, 1954; David Fairchild, August 6, 1954; D. Breese Jones, September 5, 1954; Samuel W. Boggs, September 14, 1954; Norman C. Fassett, September 14, 1954; George H. Shull, September 29, 1954; Raymond F. Bacon, October 14, 1954; Austin H. Clark, October 28, 1954; Vera K. Charles, November 2, 1954; E. B. Babcock, December 8, 1954; and Cornelius J. Connolly.

The Board of Managers held nine meetings during the year to transact the regular business of the Academy. A new standing committee, the Committee on Science Education, was authorized and appointed for the purpose of improving the teaching of science in the schools of the metropolitan area (see Journal **44**(12): 403. 1954). The District of Columbia Branch of the American Meteorological Society was affiliated with the Academy by action of the Board at the April meeting.

Seven regular meetings were held during the year in addition to the Annual Meeting as follows:

On February 18, 1954, the speakers were the recipients of the 1953 Academy Awards for Scientific Achievement. Bernard Horecker spoke on *An oxidative pathway for the metabolism of carbohydrates;* Robert Henry on *Mechanized production of electronics;* and John R. Pellam on *Properties of matter at low temperatures.*

The meeting of March 18, 1954, was held jointly with the Washington Branch of the Society of American Bacteriologists. Dr. Henry Welch, Department of Health, Education, and Welfare, delivered a lecture on *Antibiotics in 1954.*

On April 15, 1954, the meeting of the Academy was held jointly with the Washington Junior Academy of Sciences. Certificates of Merit were presented to selected high school students. Two talks were given by members of the Junior Academy: *Study in allergy* by Mary Jeanne Kreek, and *Spectrographic determination of intermediate products in catalytic reactions* by Alan Frederic Haught. Dr. William F. Foshag, U. S. National Museum, Smithsonian Institution, presented an unusually interesting color film and lecture on *The life and death of a volcano.*

The meeting of May 20, 1954, was held at the Army Map Service. The program included a discussion of the Army Map Service and an opportunity to see the Niovac in operation.

On October 21, 1954, members of the Academy were guests of The Johns Hopkins University Applied Physics Laboratory, Howard County, Md. The new building was open for inspection, and a subscription dinner was served prior to the meeting. Dr. Ralph E. Gibson, director, spoke